UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 7,981,601 B2 Page 1 of 4

APPLICATION NO. : 10/566697 DATED : July 19, 2011

INVENTOR(S) : Heng Wang and Qiliang Cai

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Coversheet, FOREIGN PATENT DOCUMENTS

Foreign Patent Document reads "EP 0198328 A1 10/1986" should read -- EP 0198328 A2 10/1986 --

- Abstract, line 8, reads "tion results in the induction of high level of specific antibodies" should read -- tion results in the induction of a high level of specific antibodies --
- Column 1, line 44, reads "Ther, 3 (1), 31-36 (2001)), there is no related literature or" should read -- Ther, 3 (1), 31-36 (2001)), there are no related publications or --
- Column 1, line 66, reads "therapy of allergic response and tolerance in new born infants." should read -- therapy of allergic response and tolerance in newborn infants. --
- Column 2, line 13, reads "binant vaccines. Moreover, it is problem that the synthesis of should read -- binant vaccines. Moreover, it is a problem that the synthesis of --
- Column 2, line 60, reads "vaccines are directed can not generate satisfactory protective" should read -- vaccines are directed cannot generate satisfactory protective --
- Column 3, line 35, reads "according to the results of step e) and f);" should read -- according to the results of steps e) and f); --
- Column 3, line 42, reads "a) selecting, synthesizing and cloning into a vector a plu-" should read -- a) selecting, synthesizing and cloning into a vector plu---
- Column 4, line 16, reads "ture of random assembled bi-epitope genes as templates (in" should read -- ture of randomly assembled bi-epitope genes as templates (in --

Signed and Sealed this
Twentieth Day of December, 2011

David J. Kappos

Director of the United States Patent and Trademark Office

CERTIFICATE OF CORRECTION (continued) U.S. Pat. No. 7,981,601 B2

- Column 4, line 18, reads "respectively), and in a 50 ul system primer free polymerase" should read -- respectively), and in a 50 ul system a primer-free polymerase --
- Column 5, line 4, reads "A. A blood smear of Plasmodium falciparfum 3D7; B. A" should read -- A. A blood smear of Plasmodium falciparum 3D7; B. A --
- Column 5, line 5, reads "blood smear of Plasmodium falciparfum FCC1; C. A blood" should read -- blood smear of Plasmodium falciparum FCC1; C. A blood --
- Column 6, line 31, reads "immunogenic in the literature on Plasmodium falciparfum" should read -- immunogenic in the literature on Plasmodium falciparum --
- Column 6, line 52, reads "which differ from that with cDNA expression libraries, lie in" should read -- which differ from that with cDNA expression libraries, lie in the fact --
- Column 7, line 18, reads "In order to inhibit the growth of Plasmodium falciparfum" should read -- In order to inhibit the growth of Plasmodium falciparum --
- Column 7, line 23, reads "stages of Plasmodium falciparfum which are homologous to" should read -- stages of Plasmodium falciparum which are homologous to --
- Column 7, line 35, reads "damer sites of Bc1/I and BamHI were introduced into the" should read -- damer sites of Bc/I and BamHI were introduced into the --
- Column 7, line 39, reads "NO: 1) was introduced near the BcII and BamHI linkage site" should read -- NO: 1) was introduced near the Bc/I and BamHI linkage site --
- Column 7, line 54, reads "BcII and BamHI and treated with equal volume of phenol," should read -- Bc/I and BamHI and treated with equal volume of phenol, --
- Column 7, line 55, reads "followed by centrifugation at 12000 rpm for 5 mm. The" should read -- followed by centrifugation at 12000 rpm for 5 min. The --
- Column 7, line 59, reads "c) The digested product was ligated to vector VR1012" should read -- c) The digested product was ligated to vector VR1 012 --
- Column 7, line 60, reads "(Vical Inc.) which had been digested with same enzymes, and" should read -- (Vical Inc.) which had been digested with the same enzymes, and --
- Column 7, line 67, reads "vector VR1012." should read -- vector VR1 012 --
- Column 8, line 4, reads "falciparfum" should read -- falciparum --

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- Column 8, line 11, reads "conjunction with a Hind/III site. Briefly, for the randomiza-" should read -- conjunction with a HindIII site. Briefly, for the randomiza---
- Column 8, line 15, reads "aliquots. One was cleaved with BC/I and Hind/III the other" should read -- aliquots. One was cleaved with BC/I and HindIII, the other --
- Column 8, line 16, reads "with BamHI and Hind/III. And the fragments from the two" should read -- with BamHI and HindIII. And the fragments from the two --
- Column 8, line 64, reads "C., 3 mm 94 C., 30 sec; 50 C., 30 sec; 72 C., 30 sec; 30" should read -- C., 3 min 94 C., 30 sec; 50 C., 30 sec; 72 C., 30 sec; 30 --
- Column 9, line 1, reads "VR1O12 which had been cleaved with EcoRV and BC/I, and" should read -- VR1 012 which had been cleaved with EcoRV and Bc/I, and --
- Column 9, line 19, reads "Chimeric Genes of Plasmodium falciparfum" should read -- Chimeric Genes of Plasmodium falciparum --
- Column 9, line 28, reads "The PCR product was cleaved with bc/I and BamHI and" should read -- The PCR product was cleaved with Bc/I and BamHI and --
- Column 10, line 13, reads "the gel for at least 20 mm with horizontally shaking slowly." should read -- the gel for at least 20 min with horizontal shaking slowly. --
- Column 10, line 54, reads "from OD250/OD280 measured with DU70 ultraviolet spectro-" should read -- from OD250/OD280 measured with DU70 ultraviolet spectro --
- Column 11, line 26, reads "and 100 ul of the diluted antisera with each concentration in" should read -- and 110 ul of the diluted antisera with each concentration in --
- Column 12, lines 1-2, read "1) Recognition of Native Proteins of Plasmodium falciparfum" should read --1) Recognition of Native Proteins of Plasmodium parum --
- Column 12, lines 3-4, read "a) Blood cells with erythrocytic stage Plasmodium falciparfum 3D7 (or FCC1) (with an infection rate of about 2%)"
 - should read -- a) Blood cells with erythrocytic stage Plasmodium falciparum 3D7 (or FCC1) (with an infection rate of about 2%) --
- Column 12, line 33, reads "native proteins of Plasmodium falciparfum in above section" should read -- native proteins of Plasmodium falciparum in above section --

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- Column 12, line 38, reads "Plasmodium falciparfum by the antisera generated by the" should read -- Plasmodium falciparum by the antisera generated by the --
- Column 12, line 42, reads "from the Spanin-treated Plasmodium falciparfum. Poly-" should read -- from the Spanin-treated Plasmodium falciparum. Poly-
- Column 12, line 50, reads "of Plasmodium falciparfum strain 3D7 was collected by cen-" should read -- of Plasmodium falciparum strain 3D7 was collected by cen---
- Column 14, line 40, reads "of cytokine CD8, wherein positive polyepitope gene 5P312" should read -- of cytokine CD8, wherein positive polyepitope gene SP312 --
- Column 14, line 42, reads "5P352 or SP462. In contrast, negative polyepitope genes" should read -- SP352 or SP462. In contrast, negative polyepitope genes --
- Column 14, line 43, reads "behaved similar to empty vector, demonstrating that poly-" should read -- behaved similarly to empty vector, demonstrating that poly --
- Column 34, line 57, reads "a) selecting, synthesizing and cloning Into a vector a plu-" (Claim 10) should read -- a) selecting, synthesizing and cloning into a vector a plu---
- Column 35, lines 21-22, reads "13. The method according to claim 1, wherein the randomly assembling of the polyepitope chimeric genes with" (Claim 13)
 - should read --13. The method according to claim 1, wherein the random assembling of the polyepitope chimeric genes with --
- Column 36, lines 10-11, reads "16. The method according to claim 10, wherein the randomly assembling of the polyepitope chimeric genes with"
 - should read --16. The method according to claim 10, wherein the random assembling of the polyepitope chimeric genes with --
- Column 36, line 12, reads "different lengths in step c) is carried out simultaneously by" (Claim 16) should read -- different lengths in step c) is carried out simultaneously by the --